



CubeSat Construction

ORA Industry Applications
Robot Arms in Space

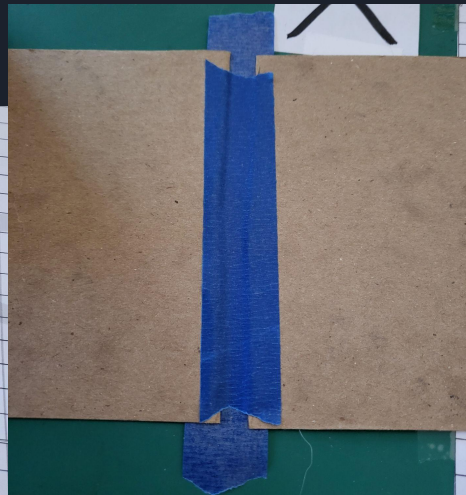
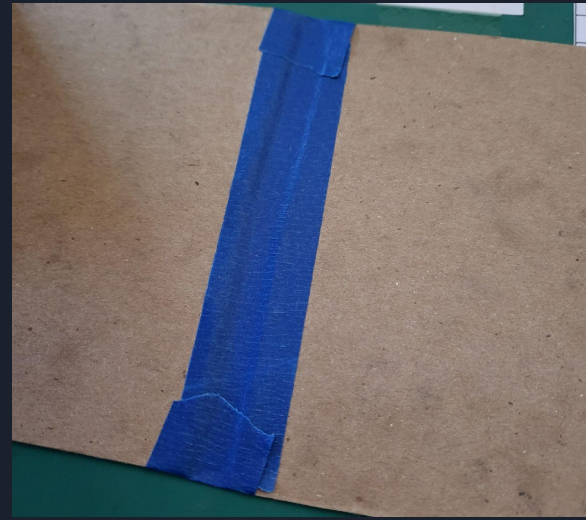
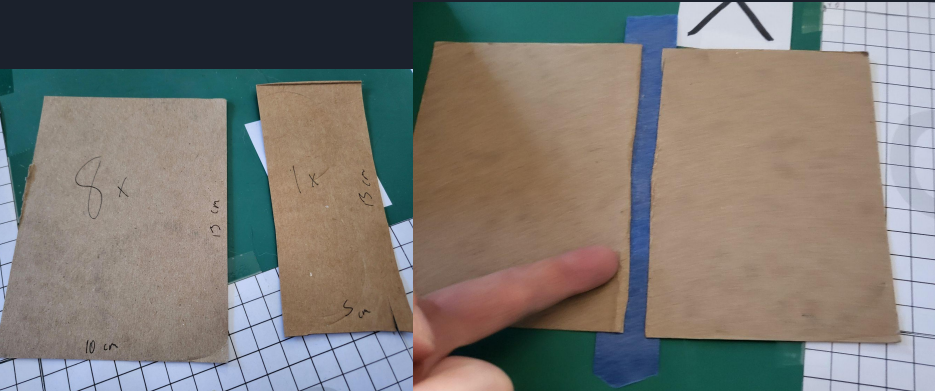
Constructing the Body

1. Create open-topped box approximately 150mm x 150mm x 150mm
2. Create a simple flap lid
3. Tape the lid to the box to make a basic hinge
4. Add a piece of tape to create a tab where ORA can grab on



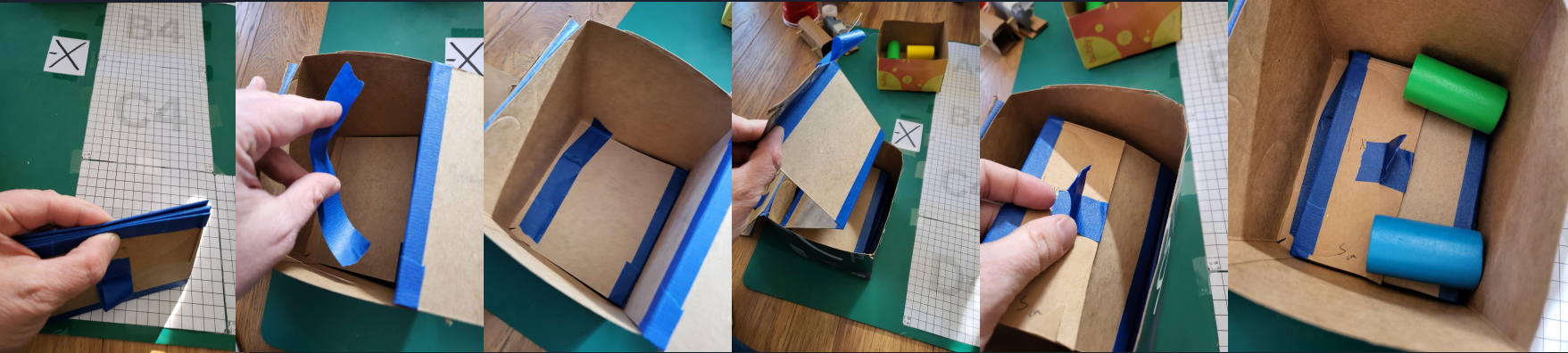
Creating 'Solar Panels'

1. Make 8 panels approximately 10x13cm and 1 5x13
2. Tape them together leaving a small gap to allow for flexibility
3. Attach them all together as a single line with the smaller piece on the end.



Stowing the Panels

1. Fold the panels back and forth to accordion them into a pile
2. Tape the end (without the small panel) to the bottom of the cubesat body
3. Place the rest of the folded panel in the bottom of the body
4. Make a tape tab on the smallest panel that sticks up
5. Weight down the panels if necessary with a small mass (like the cylinders!)
6. Close the flap and you're ready for the Robot Arms in Space Lesson!



Deployable Solar Panels in Action!

Notes:

1. If you use wooden cylinders to hold the cardboard down, they don't impede opening the panels.
2. If your cardboard is very close to the inside size of the box, it can stick on opening. If that happens, you can tape the box down to keep it from moving.

